



XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Charles Bordenave, CNRS**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Non-backtracking spectrum and sparse random matrices**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Insuk Seo, University of California at Berkeley**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Metastability without time-reversibility**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Ioan Manolescu, University of Fribourg**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**First order phase transition for the Random Cluster model with $q > 4$** ”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE



atividade do





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Markus Heydenreich**, **Ludwig-Maximilians Universitaet Muenchen**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: **“Scale-free percolation”**.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Mathieu Lerasle**, **Université Paris XI - Orsay**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Learning latent structure in large random graphs**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Milton David Jara Valenzuela**, Instituto Nacional de Matemática Pura e Aplicada, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Non-equilibrium fluctuations of interacting particle systems**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Pablo A Ferrari, Universidad de Buenos Aires**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Stationary solitons in the Box Ball System in Z** ”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE



XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Pietro Caputo**, **Universita Degli Studi "roma Tre"**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Cutoff at the entropic time for sparse Markov chains**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE





XXI
Escola
Brasileira de
Probabilidade

IMPA, Rio de Janeiro
July 31 - August 5, 2017

We hereby certify that, **Stefan Grosskinsky, University of Warwick**, participated in the XXI Brazilian School of Probability, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from July 31st to August 5th, 2017 and presented a plenary talk: “**Derivation of mean-field rate equations for misanthrope processes**”.

Rio de Janeiro, August 5th, 2017

Claudio Landim
Organizing Committee

CERTIFICATE

